Part 11 · The Escape Challenge

Five gates, each a calculation. Each gives you one digit. Collect all five to unlock the exit code.

🔒 GATE 1 — The Standard-Form Gate

Find the value of a in the equation $2x^2+x-300=0$.

Digit: ☐

🔒 GATE 2 — The Discriminant Gate

Find the discriminant of $x^2-4x+4=0$.

Digit: ☐

🔒 GATE 3 — The Root Gate

One root of $x^2-3x-10=0$ is 5. Take the absolute value of the other root.

Digit: ☐

🔒 GATE 4 — The Pole Gate

In the circular-park problem, the pole is x metres from gate B. Take the value of x.

Digit: ☐

🔒 GATE 5 — The Degree Gate

A quadratic equation comes from a polynomial of what degree?

Digit: ☐

EXIT CODE: ☐ ☐ ☐ ☐ ☐

You can now recognise a quadratic equation in disguise, solve it by factorisation, and — without solving at all — predict how many real roots it has just from the discriminant. That is the whole chapter in one sentence. ✔